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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,473	01/09/2002	W. Alan Burris		6088

37211 7590 09/09/2004
BASCH & NICKERSON LLP
1777 PENFIELD ROAD
PENFIELD, NY 14526

EXAMINER

TRAN, THAO T

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/042,473

Applicant(s)

BURRIS ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This is in response to the Amendments received on July 09, 2004.
2. The Amendments to the specification and Figures 3 & 5a-c are acknowledged.
3. Claims 1-8 and 10-32 are currently pending in this application. Claim 9 has been canceled. Claim 1 has been amended.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 and 10-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Burris (US Pat. 5,213,773).

Burris '773 teaches a liquid treatment system 10, comprising an untreated liquid source 11, a corona discharge ozone generator 20, a gas check valve 22, a liquid check valve 16, a venturi 21 or pump 25 (static mixer), for conducting the ozone-containing gas and the untreated liquid to the venturi or the pump, a control system 12, an outlet for liquid containing ozone to pass through filter 31; wherein the ozone-containing gas is mixed with the untreated liquid before the liquid is output (see abstract; Figures 1-5). Note: the examiner is treating the gas valve

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22 and the venturi 21 or pump 25 would constitute a gas pumping system and the liquid valve 16 and the venturi 21 or pump 25 would constitute a liquid pumping system.

Burris '733 further teaches the pump means or venturi to combine and mix the ozone-containing gas and the untreated liquid and delivers the mixture to a contact chamber 18 via an inline mixer 19 (see col. 3, ln. 13-25). The reference teaches vent 26 to vent excess ozone out of the chamber 18, an ozone reducer 28 the concentration of any ozone escaping to the atmosphere (see col. 3, ln. 28-34).

Burris '773 further teaches pump 25 or 35 a positive pressure liquid pump that can withdraw the untreated liquid from source 11 or excess ozonated liquid from chamber 18 and mix the liquid with the ozone-containing gas (see Fig. 1-2; paragraph bridging col. 4-5).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burris '773 as applied to claim 1 above, and further in view of Burris (US Pat. 5,422,043) or Burris (US Pat. 5,858,283).

Burris '773 is as set forth in claim 1 above and incorporated herein.

Burris '773 does not teach the use of a diffuser to disperse the ozone-containing gas into the liquid.

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Burris '043 or Burris '283 teaches the use of a diffuser for dispersing gas bubbles into a liquid (see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used a gas diffuser, as taught in Burris '043 or Burris '283, into the apparatus of Burris '773, for enhancing the dispersal of the ozone-containing gas into the liquid.

Response to Arguments

8. Applicant's arguments filed August 9, 2004 have been fully considered but they are not persuasive.

Applicants allege that Burris '773 does not teach an outlet for liquid containing dissolved ozone. However, as shown in Figures 1-6 of the reference, ozonated liquid from the contact chamber is directly output through an outlet. Thus, Burris '773 does teach the limitation of "an outlet for liquid containing dissolved ozone". Thus, Burris '773 anticipates the presently claimed invention.

Furthermore, Burris '773 also teaches a corona discharge ozone generator, excess ozonated liquid being recirculated, and a removable liquid reservoir 13 (see Figs. 1-5; col. 3, ln. 40-56).

In response to Applicants' argument that neither '043 nor '283 teaches an outlet for liquid containing dissolved ozone, and therefore, not combinable with Burris '773, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of

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the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Thus, the combination of '773 and '043 or '283 would be obvious over instant claim 8.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

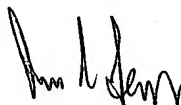
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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September 01, 2004



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700